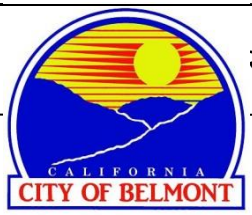

2016 CA MECHANICAL CODE 701.4

STANDARD METHOD EQUATIONS:

701.4.1 & 701.4.2

COMBUSTION AIR

701.4.1 Standard Method. The required volume shall be not less than fifty (50) cubic feet per 1,000 Btu/hour (4.8m^3 /kW) [NFPA 54: 9.3.2.1].

701.4.2 Known Air Infiltration Rate Method. Where the air infiltration rate of a structure is known, the required volume shall be not less than the following [NFPA 54: 9.3.2.2]:

(1) For appliances other than fan-assisted, calculate using Equation 701.4.2(1).
(2) For fan-assisted appliances, calculate using Equation 701.4.2(2).
(3) For purposes of these calculations, an infiltration rate greater than 0.60 ACH shall not be used in the equations.

Equation 701.4.2(1):
Required Volume $_{other} \geq$ (21 $ft.^3$ / ACH) x (I_{other}/1,000 Btu/h)
.
Equation 701.4.2(2):
Required Volume $_{fan} \geq$ (15 $ft.^3$ /ACH) x (I_{fan}/1,000 Btu/h)

WHERE:

I $_{other}$ = Appliances other than fan-assisted input in Btu per hour

I $_{fan}$ = Fan-assisted appliance input in Btu per hour

ACH = Air change per hour (percent of volume of space exchanged per hour, expressed as a decimal)